

Title (en)

MODIFIED NATURAL RUBBER, METHOD FOR PRODUCING SAME, RUBBER COMPOSITION, AND PNEUMATIC TIRE

Title (de)

MODIFIZIERTER NATURKAUTSCHUK, VERFAHREN ZU SEINER HERSTELLUNG, KAUTSCHUKZUSAMMENSETZUNG UND LUFTREIFEN

Title (fr)

CAOUTCHOUC NATUREL MODIFIÉ, SON PROCÉDÉ DE PRODUCTION, COMPOSITION DE CAOUTCHOUC, ET PNEUMATIQUE

Publication

EP 2581390 B1 20150114 (EN)

Application

EP 11792518 A 20110609

Priority

- JP 2010133094 A 20100610
- JP 2010133093 A 20100610
- JP 2011063248 W 20110609

Abstract (en)

[origin: US2013066021A1] The present invention provides a modified natural rubber having a reduced tan δ , a method for producing the modified natural rubber, a rubber composition produced using the modified natural rubber, and a pneumatic tire produced using the rubber composition. The present invention also provides a modified natural rubber having a reduced tan δ , a method for producing the modified natural rubber, a rubber composition produced using the modified natural rubber and achieving good fuel economy and abrasion resistance at the same time, and a pneumatic tire produced using the rubber composition. The present invention relates to a modified natural rubber having a phosphorus content of 200 ppm or less and a total content of sodium and potassium of 350 ppm or less. The invention also relates to a modified natural rubber having a phosphorus content of 200 ppm or less and a nitrogen content of 0.2% by mass or less.

IPC 8 full level

C08C 1/04 (2006.01); **B60C 1/00** (2006.01); **C08K 3/06** (2006.01); **C08K 5/14** (2006.01); **C08K 5/40** (2006.01); **C08L 7/00** (2006.01); **C08L 15/00** (2006.01)

CPC (source: EP US)

B60C 1/0016 (2013.01 - EP US); **B60C 1/0025** (2013.01 - EP US); **C08C 1/04** (2013.01 - EP US); **C08C 3/02** (2013.01 - EP US); **C08L 15/00** (2013.01 - EP US); **C08J 2307/02** (2013.01 - EP US); **Y02T 10/86** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 2013066021 A1 20130314; **US 9181355 B2 20151110**; BR 112012031479 A2 20161101; CN 102892788 A 20130123; CN 102892788 B 20150325; EP 2581390 A1 20130417; EP 2581390 A4 20131030; EP 2581390 B1 20150114; RU 2012156034 A 20140720; WO 2011155561 A1 20111215

DOCDB simple family (application)

US 201113699533 A 20110609; BR 112012031479 A 20110609; CN 201180024091 A 20110609; EP 11792518 A 20110609; JP 2011063248 W 20110609; RU 2012156034 A 20110609